

COLLISION NR: AP4046447

the magnesium begins to melt. At the stoichiometric ratio of the  
 reagents, the reaction  $2ScF_3 + 3Mg \rightarrow 2Sc + 3MgF_2$  takes place at temperatures up to  
 1000°C. It is entirely in the direction of the formation of scandium.  
 The authors obtained the scandium compounds  $ScF_3$  and  $ScF_4$  in 23.3%  
 yield. Gas: 4 figures and 2 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V.  
 Lomonosova, Kafedra neorganicheskoy khimii (Moscow State University,  
 Inorganic Chemistry)

110163

ATD PERIOD

NO

NO REFERENCE

END

Word 273

AP 4046447

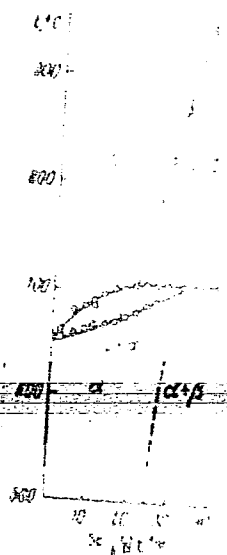


Fig. 1. Phase diagram of the system.

BRUNOV, V.K.; VLADIMIROVA, Z.A.; KOVBA, L.M.; KOMISSAROVA, L.N.

Binary oxides in the system  $ZrO_2 - Nb_2O_5$ . Izv. AN SSSR. Neorg. nat.  
1 no.7:1152-1154 J1 '65. (MIRA 18:9)

1. Khimicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta  
imeni M.V.Lomonosova.

I 7539-66 EWT(m)/EPF(c)/EWP(t)/EWP(b) IJP(c) JD/JG/MB

ACC NR: AP5025782

SOURCE CODE: UR/0363/65/001/009/1493/1497

AUTHOR: Komissarova, L. N.; Men'kov, A. A.; Vasil'yeva, L. M.

ORG: Moscow State University im. M. V. Lomonosova (Moskovskiy gosudarstvennyy universitet)

TITLE: Properties of scandium phosphide

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 9, 1965, 1493-1497

TOPIC TAGS: phosphide, scandium compound, corrosion resistance, physical chemistry property

ABSTRACT: Scandium phosphide was obtained by direct reaction of metallic scandium and red phosphorous. The substances were mixed in powder form in a quartz ampoule. A table shows the detailed temperature conditions used for the reaction. The resulting fine black powder was analyzed for scandium and phosphorous. The article gives a diagram of the analytical apparatus and the results of analysis in tabular form. X-ray analysis was done by the powder method. The x-ray photos were taken with a RKD-86 camera with filtered copper irradiation.

Card 1/2

UDC:546.633'181.1

L 7539-66

ACC NR: AP5025782

The scandium phosphide obtained had a crystal structure of the sodium chloride type with  $a = 5.302 \pm 0.005$  kX,  $Z=4$ . Its density at 20C was 3.33 grams/cm<sup>3</sup>. The compound was thermally stable during heating in a high vacuum ( $10^{-4}$  mm Hg). It underwent no polymorphic transitions in the interval from 20 to 1500C and did not melt up to 2000 C. However, during heating above 1000 C, even in a high vacuum, the surface of the sample oxidized with the formation of scandium phosphate. In air, scandium phosphide begins to oxidize noticeably above 350C. A sample held in air at 1200 C to constant weight, increases in weight by 79%. X-ray analysis of the oxidized sample shows the lines characteristic of anhydrous ScPO<sub>4</sub>(scandium phosphate) with the parameters  $a=6.578 \pm 0.003$  A,  $c=5.795 \pm 0.005$  A. The chemical resistance of scandium phosphide was investigated in water, acids (HCl, H<sub>2</sub>SO<sub>4</sub>, and HNO<sub>3</sub>), and alkalis (25 and 50% solutions of NaOH) of different concentrations. Results are shown in a table. In general, scandium phosphide was found to be resistant to water and alkaline solutions, but to be easily decomposed by acids. Orig. art. has: 2 figures and 5 tables

SUB CODE:IC/ SUBM DATE: 19May65/ ORIG REF: 003/ OTH REF: 002

Card 2/2

KOMISSAROVA, L.N.

The monthly rhythm. Trudy Kaz. NIGMI no.6:56-59 '56. (MIRA 10:9)  
(Meteorology)

KOMISSAROVA, L-N.

PHASE I BOOK EXPLOITATION

p. 2.

387

AUTHOR: See table of contents

TITLE: Trudy Tsentral'nogo instituta prognozov (Transactions of the Central Institute of Forecasting). Nr 51, Voprosy dolgosrochnykh prognozov (Long-term Forecast Problems)

PUB. DATA: Gidrometeorologicheskoye izdatel'stvo, Leningrad, 1957, 150 pp., 1,000 copies

ORIG. AGENCY: Glavnoye upravleniye gidrometeorologicheskoy sluzhby pri Sovete ministrov SSSR

EDITOR: Kurganskaya, V. M.; Pisarevskaya, V. D.; Tech. Ed.: Vladimirov, O. G.

PURPOSE: This collection of articles is for specialists in the field of long-term weather forecasting.

COVERAGE: The collection of articles analyzes the rhythmicity of atmospheric processes and especially those originating in polar regions, and it evaluates the possibility of using the occurrence of rhythms in weather forecasting.

Card 1/7

formations in atmospheric processes and their deviation from some definite synoptic patterns. There are 3 tables, 14 maps, 2 diagrams, and 3 Soviet references.

Card 2/7

Transactions of the Central Institute of Forecasting

387

Vitel's, L. A. Solar Origin of Atmospheric Rhythms

22

The author examines the relationship between solar activity and atmospheric processes and draws the following conclusions: 1. Periods of intensified solar activity can neither be ascribed to definite areas nor can they be considered constant in their degrees of intensity. 2. Although rhythmic changes in atmospheric processes are dependent on variations in solar activity, yet similar solar effects do not always produce identical responses in atmospheric rhythms. The article mentions S. T. Pagava, K. V. Brodovitskiy, P. P. Predtechenskiy, B. M. Rubashev (Pulkovo Observatory), M. N. Gnevyshev (Pulkovo Observatory), M. S. Eygenson, V. G. Shishkov, and V. V. Shuleykin as the leading scientists in the field of studies of solar impact on atmospheric processes. There are 11 diagrams, 2 maps, and 26 references, of which 20 are Soviet, 1 is French and 5 are in English.

Isayev, E. A.

Investigation of a Sharp Decline in Temperature in European USSR Caused by Certain Synoptic Processes.

The author separates the occurrence of cold waves in synoptic processes of the moderate zone of European USSR into ultra polar, meridional and normal types and remarks on the role of the advection of cold air masses from the polar region.

Card 3/7

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000824120004-0

The first chapter of the article contains general information on the nature of cold waves, and a number of anticyclonic outbreaks travelling southwards is analyzed. The existence of monthly rhythmicity in all types of processes and its application in long-term forecasts is the subject of the second part of the article. In the third part the author compiles statistical data on air temperature during the first six months of the year for Moscow, Voronezh, Penza, and Vologda and he demonstrates the probability of recurrence and rhythmicity in such repetitions. The author defines the term "sharp" decline in temperature as a decline of the average daily temperature by 5° to 10°C during cold seasons and 3° to 7°C in warm seasons provided that such temperature lapse occurs within 1-2 days. The author concludes that in addition to seasonal rhythmicity there are also monthly rhythms of synoptic processes. The statistical data are to prove that a definite successive recurrence exists among the various types of air circulation and also in the location and distribution of baric fields. Consequently, the occurrence of certain types of synoptic situations during a given period will allow the prediction of definite synoptic situations in the non-distant future. There are 11 tables, 14 maps, and 5 Soviet references.

Card 4/7



Transactions of the Central Institute of Forecasting

387

Avanesova A. G., Kask L. I., and Yausheva G. Sh. Occurrence of Selected Ultra-polar Processes in Central Asia and Kazakhstan.

83

The authors evaluate the efficacy of long-term weather forecasts based on the periodic occurrence of ultrapolar processes. The latter are traced along their meridional extent from some definite reference points in the North, i.e., the Barents Sea, Novaya Zemlya, etc. In the appendix, 54 ultrapolar processes are analyzed and their reference localities specified. In addition, the tabular material specifies also the occurrence of respective synoptic phenomena consequent upon the appearance of polar air processes. The rhythmicity of recurrence is repeated in intervals of 3 to 5 months. There are 11 maps, 1 diagram, and 4 tables, in addition to 16 pages of tabular data in the appendix. All 7 references are Soviet.

Goncharova, Ye. F. Synoptic Conditions of the Exceptionally Cold Spring of 1952 in Northern Caucasus

117

The average daily temperature in March was 2° to 5°C below the norm and in April and May, 1° to 1.5°C. Similar conditions were observed during the springs of 1945, 1940, 1933, etc. The article analyzes these conditions. There are

Card 5/7

recurrence of conditions can be observed every 3 to 5 months. In 1952, S. T. Pagava proved that there are also intermediate rhythms which repeat at intervals of 45-75 days. In the present article the author not only recapitulates the work of his predecessors but also describes the nature of such polar processes. The author also describes the nature of such processes, such as the Kara Sea, Kolyma, etc. The author explains the role of these processes

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000824120004-0

Card 6/7

In synoptic forecasts and their low reliability. The appendix contains data on synoptic processes which may be similar, different, or reversed with respect to their corresponding polar processes. There are 3 maps, 5 diagrams, 8 Soviet references, 5 tables, and a 9-page appendix.

AVAILABLE: Library of Congress (QC 851.M64)

Card 7/7

GC/bmd  
6 June 1958

Komissarova, L.N.

AUTHOR: Burkova, M. V.

50-2-19/22

TITLE: Some Remarks on the Paper by L.N. Komissarova "The Frequency of Southern Cyclones Over Central Asia and Kazakhstan".  
(Nekotoryye zamechaniya po rabote L.N. Komissarovoy "Povtoryayemost' yuzhnykh tsiklonov nad Sredney Aziyey i Kazakhstanom").

PERIODICAL: Meteorologiya i Gidrologiya, 1958, Nr 2, pp. 52-53 (USSR).

ABSTRACT: L.N. Komissarova treats in her work anew the problem of the origin of the southern cyclones which has been solved already a long time ago by central asiatic synopticians. The author determines 6 types of cyclones according to the characteristic of the regions of their origin. She determines the average positions of the frontal altitude zones for each type and gives statistics on the frequency of the various types during the time from 1931 to 1951, i.e. the following types: 1) South-Caspian, 2) Aschhabad, 3) North-Caspian, and 4) Furgaysk cyclones, 5) cyclones of the Aral Sea and 6) Syr-dar'ynsk cyclones. The division of the central asiatic south-cyclones into 3 main types, south-Caspian, Murgabsk, and upper-Amudarynsk, which for long years had been subjected to an examination, were completely ignored by Mrs. Komissarova. She

Card 1/2

Some Remarks on the Paper by L.N. Komissarova "The Frequency of Southern Cyclones Over Central Asia and Kazakhstan".

50-2-19/22

neither tries to compare the statistical data obtained by her to the statistics of Sarymsakov, T.A., V.A. Bugayev, and V.A. Dzholdzhio, nor to criticize their principles used for the classification of cyclones. The exploitation of the aerological data in the research of the origin of the cyclones is a positive fact of Komissarova's paper. The ignorance of the technical literature in this case has led Mrs. Komissarova to an inadequate representation and to the repetition of facts which have been worked out thoroughly already a long time. There are 9 Slavic references.

AVAILABLE: Library of Congress

Card 2/2

TSIREL'NIKOV, V.I.; KOMISSAROVA, L.N.; SPITSYN, Vikt.I., akademik

Vapor density of hafnium tetrachloride at high temperatures.  
Dokl.AN SSSR 145 no.5:1081-1084 '62. (MIRA 15:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Hafnium chloride) (Vapor density)

KOROVIN, S.S.; MIRONENKO, A.P.; REZNIK, A.M.; KOMISSAROVA, L.N.

Extraction of hydrochloric acid and of certain elements by  
acetophenone. Izv.vys.uch.zav.; khim.i khim.tekh. 5  
no.4:553-558 '62. (MIRA 15:12)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii  
imeni Lomonosova, kafedra tekhnologii redkikh i rasseyannykh  
elementov.

(Hydrochloric acid)  
(Acetophenone)

SHATSKIY, V.M.; KOMISSAROVA, L.N.; SPITSYN, Vikt. I.

Precipitation of scandium hydroxide and scandium oxalate.  
Zhur.neorg.khim. 7 no.10:2294-2298 0 '62. (MIRA 15:10)  
(Scandium compounds) (Precipitation (Chemistry))

KOMISSAROVA, L. N.

TITLE: Seminar on refractory metals, compounds, and alloys (Kiev, April 1963).

SOURCE: Atomnaya energiya, v. 15, no. 3, 1963, 266-267.

ACCESSION NR: AP3008085

5a metals and carbon; mutual solubility of transition metals.

L. N. Komissarova and others. Investigation of the physical properties of scandium and its compounds.

L. M. Kovba, V. K. Trunov. Investigation of the composition and structure of transition-metal oxide compounds.

A. P. Epik. Laws governing the change of the activation energy in the reaction diffusion of nonmetals in refractory transition metals.

B. N. Oshcherin. New formulas for calculating the activation energy of self-diffusion.

The special equipment used in the investigation of refractory materials such as Nb, Mo, Ta, W, and monocarbides at temperatures above 2000—2500C was described by A. Ye. Sheyndin (metals), A. Novitskiy (hard materials), and D. L. Timrot (alloys and compounds).

Card 7/11

APPROVED FOR RELEASE 06/13/2000

CIA-RDP86-00513R000824120004-0"

Solubility of  $\text{Sc}(\text{NO}_3)_3 \cdot 4\text{H}_2\text{O}$  and  $\text{ScOH}(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O}$  in water, in solutions of nitric acid, and in organic solvents. Zhur. neorg. khim. 8 no. 6:1498-1504 Je '63. (MIRA 16:6)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, kafedra neorganicheskoy khimii.

(Scandium compounds) (Nitric acid)  
(Solubility)

S/020/63/149/003/019/028  
B192/B102

AUTHORS: Komissarova, L. N., Pokrovskiy, B. I.

TITLE: On the thermal stability of  $\text{ScF}_3$  and its interaction with  $\text{MgF}_2$

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149, no. 3, 1963, 599-601

TEXT: The melting temperature and the thermal stability of  $\text{ScF}_3$  as well as its interaction with  $\text{MgF}_2$  in the molten state are investigated. The thermal stability of  $\text{ScF}_3$  was measured by continuously weighing the samples in a temperature range from 20-1000°C. A small loss of weight was already observed when they were heated up to 400°C in air. Above 650°C there is a strong change in weight, ceasing at 950°C where it amounts to 32.3%. The Debye diagrams of samples having different losses of weight show only the lines of the scandium oxides and of the fluoride, with no oxyfluorides. The rate at which  $\text{ScF}_3$  becomes transformed into  $\text{Sc}_2\text{O}_3$  depends considerably on the temperature. At 900°C the complete transformation requires 2.5 hours, at 800°C 5.3 hours, at 700°C as long as 11 hours. The  $\text{ScF}_3$  melts  
Card. 1/3

On the thermal stability of  $\text{ScF}_3$  ...

S/020/63/149/003/019/028  
B192/B102

at  $1530 \pm 20^\circ\text{C}$  and undergoes a polymorphic transformation at  $1350 \pm 20^\circ\text{C}$ . In the system  $\text{ScF}_3 - \text{MgF}_2$  there is a narrow range of solid solutions between 0 and 5 mol%  $\text{ScF}_3$  whose existence is confirmed by the decrease of the polymorphic transformation temperature from  $960^\circ\text{C}$  for pure  $\text{MgF}_2$  to  $840^\circ\text{C}$  for alloys containing more than 5 mol%  $\text{ScF}_3$ . Besides this, a decrease of the lattice constant of the solid phase was found if the concentration of  $\text{ScF}_3$  was increased. The  $\text{ScF}_3$  and the solid solution with  $\text{MgF}_2$  formed a eutectic. The eutectic point corresponds to 34 mol%  $\text{ScF}_3$ , the melting temperature of the eutectic mixture is  $1095^\circ\text{C}$ . There are 4 figures and 1 table.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

PRESENTED: November 22, 1962, by V. I. Spitsyn, Academician  
Card 2/3



ACCESSION NR: AP4019495

S/0078/64/009/003/0693/0697

AUTHOR: Komissarova, L. N.; Wang, Ken-shih; Spitsy\*n, Vikt. I.; Simanov, Yu. P. (Deceased)

TITLE: The La sub 2 O sub 3-HfO sub 2 system

SOURCE: Zhurnal neorg. khimii, v. 9, no. 3, 1964, 693-697

TOPIC TAGS: La sub 2 O sub 3-HfO sub 2 system, lanthanum oxide containing system, hafnium oxide containing system, phase diagram, phase transition, thermal analysis, x-ray analysis, specific electric resistance, La sub 2 Hf sub 2 O sub 7, structure, pyrochlore structure

SU ABSTRACT: The phase transitions in the  $\text{La}_2\text{O}_3\text{-HfO}_2$  system in the 1300-2450C temperature interval were investigated by thermal and x-ray analysis and by measuring the specific electric resistance of a number of samples. A phase diagram(fig. 1) was constructed in which the boundaries of several areas were approximated. The formation of the compound  $\text{La}_2\text{Hf}_2\text{O}_7$  and of solid solutions

Card 2/ Card 1/82

CIA-RDP86-00513R000824120004-0

ACCESSION NR: AP4019503

S/0078/64/009/003/0766/0767

AUTHORS: Men'kov, A.A.; Komissarova, L.N.

TITLE: X-ray investigation of scandium iodide

SOURCE: Zhurnal neorg. khimii, v.9, no.3, 1964, 766-767

TOPIC TAGS: scandium iodide, preparation, structure, x ray analysis, density

ABSTRACT: Anhydrous scandium iodide was prepared by heating a 10% excess of metallic scandium with iodine at 700C in a quartz ampoule until violet iodine vapors disappeared. X-ray study showed that  $\text{ScI}_3$  crystallizes in a rhombohedral lattice with the following parameters:  $a = 7.939 \pm 0.005$  Kx ( $Kx = 1/1.00202 \text{ \AA}$ ),  $c = 20.360 \pm 0.010$  Kx,  $c/a = 2.85$ ,  $z = 6$ .  $\text{ScI}_3$  approximates the  $\text{FeCl}_3$  type structure and consequently is characterized by the  $R\bar{3}(C_2)$  Fedorov group.  $\text{ScI}_3$  density, determined by x-ray method is 4.70 and pycnometrically is 4.63 gm/cm<sup>3</sup>. "Authors express thanks to L.M. Kovbe and coworkers of the X-ray analytical laboratory for help in the work. Orig. art. has: 1 table.

Card 1/2

ACCESSION NR: AP4019503

ASSOCIATION: None

SUBMITTED: 18Apr63      DATE ACQ: 31Mar64      ENCL: 00

SUB CODE: PH      NR REF SOV: 002      OTHER: 002

Card 2/2

MEN'KOV, A.A.; KOMISSAROVA, L.N.

X-ray diffraction examination of scandium bromide. Zhur.  
neorg. khim. 9 no.7:1759-1760 J1 '64. (MIRA 17:9)

KOMISSAROVA, L.N.; POKROVSKIY, B.I.

Magnesium-thermal reduction of scandium fluoride. Zhur. neorg.  
khim. 9 no.10:2277-2279 0 '64. (MIRA 17:12)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova,  
Kafedra neorganicheskoy khimii.





PLYUSHCHEV, V.Ye.; YURANOVA, L.I.; KOMISSAROVA, L.N.

Basic oxynitrates of zirconium and hafnium. Zhur. neorg. khim.  
10 no.3:643-646 Mr '65. (MIRA 18:7)





precipitation of oxalates from solutions. The properties and index of refraction were all-  
 the ability in the ... was in-  
 from 0.1 to 0.01 N  $H_2CO_3$  (see fig. 2 of the enclosure). The existence  
 of oxalates was established by ... extraction of  
 ... weight  
 ... thorium  
 ... increase in the ...  
 ... pentahydrate ...  
 ... precipitation of ...  
 ... purification of ...  
 ... partially from thorium. Orig. art. has: 4 figures and 3 tables.

ABSTRACT: Kafedra neorganicheskoy khimii Moskovskogo gosudarstvennogo univer-  
 siteta (Department of Inorganic Chemistry, Moscow State Uni-

SUBMITTED: 15Apr64

ENCL: 02

SUB CODE: TD, IC

Card 2/5

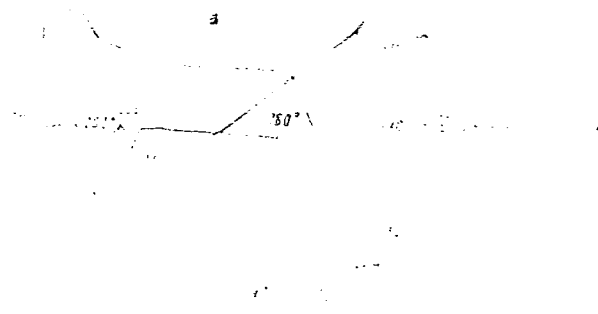
"APPROVED FOR RELEASE: 06/13/2000

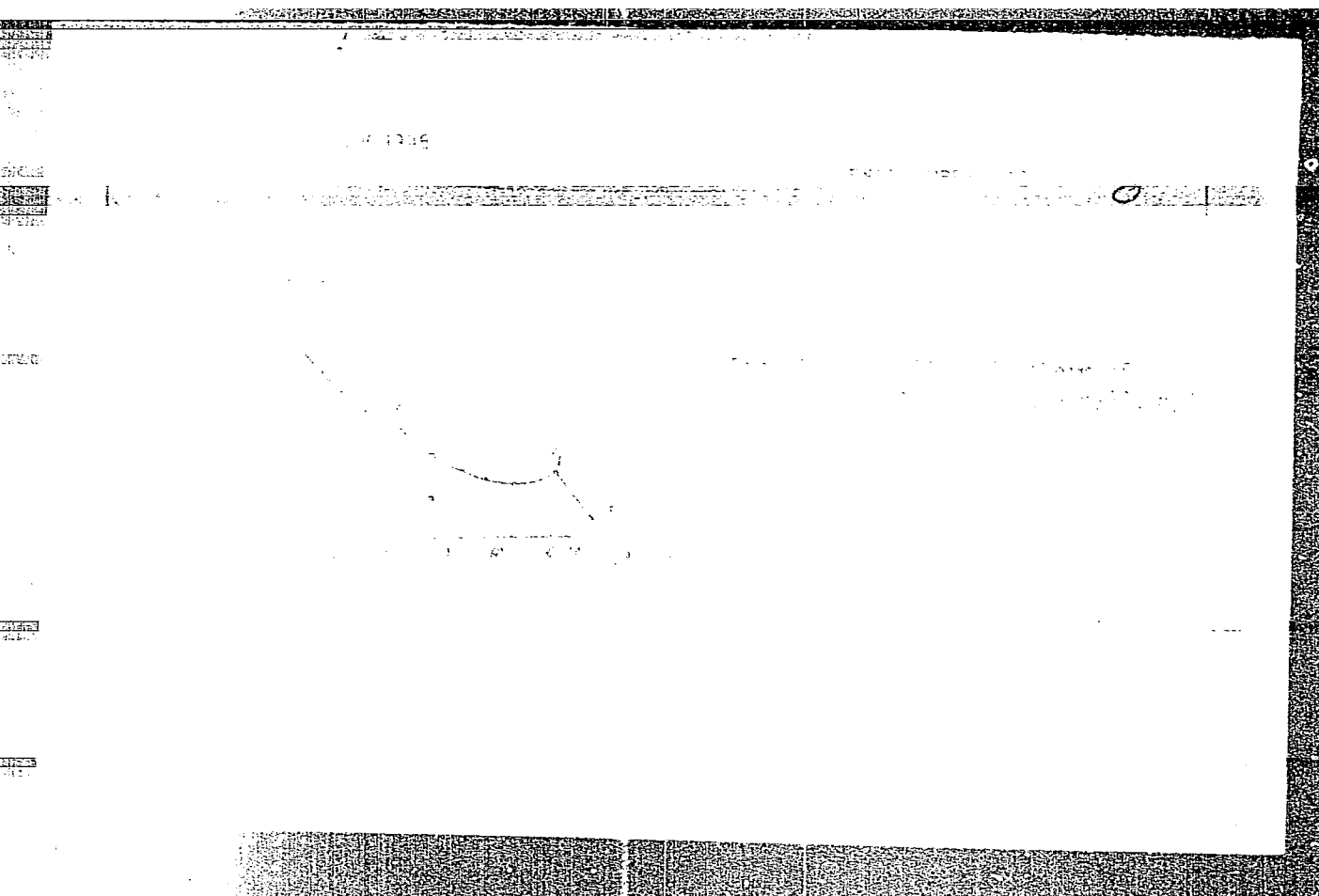
CIA-RDP86-00513R000824120004-0

Card 5/5

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000824120004-0"







MP 305005800

and turn into a ...  
The anhydrous form ...  
into  $\text{SeO}_3$  and  $\text{R}_2\text{O}$ . The ...  
with the ...  
reported ...  
monohydrate ...

... gosudarstvennaya ...  
(University)

... ENCL.

... OTHER ...

L 1557-66 EWT(m)/EPF(n)-2/T/EMP(t)/EMP(b)/EWA(c) IJP(c) JD/WJ/JG

ACCESSION NR: AF5022267

UR/0363/65/001/007/1152/1154  
546.831+546.882

AUTHOR: Trunov, V. K.; Vladimirova, Z. A.; Kovba, L. M.; Komissarova, L. N.

TITLE: Binary oxides in the ZrO sub 2-Nb sub 2 O sub 5 system

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 7, 1965, 1152-1154

TOPIC TAGS: zirconium compound, niobium compound

ABSTRACT: The formation of compounds in the  $ZrO_2-Nb_2O_5$  system was studied by x-ray phase analysis. Two methods were used to prepare the compounds: coprecipitation of hydroxides followed by annealing at 1000 and 1300C, and annealing of stoichiometric mixtures of oxides. Formation of the phase of variable composition  $Zr_{1-n}Nb_nO_{2+n/2}$  was observed and its unit cell constants were determined for various compositions. Three new phases were identified in the region rich in niobium pentoxide:  $ZrO_2 \cdot 5Nb_2O_5$ ,  $ZrO_2 \cdot 7Nb_2O_5$ , and  $ZrO_2 \cdot nNb_2O_5$  ( $5 < n \leq 7-8$ ). Interplanar distances of these compounds are tabulated. It is shown that the phase  $ZrO_2 \cdot nNb_2O_5$  is formed only when coprecipitated niobium and zirconium hydroxide are annealed. Orig. art. has: 4 tables.

Card 1/2

L 1557-66

ACCESSION NR: AP5022267

ASSOCIATION: Khimicheskiy fa'ul'tet, Moskovskiy gosudarstvennyy universitet im.  
M. V. Lomonosova (Chemistry Department, Moscow State University)

SUBMITTED: 27Feb65

ENCL: 00

SUB CODE: IC, SS

NO REF SOV: 001

OTHER: 002

Card

2/2



SPITSYN, Vikt.I.; GRANOVSKIY, Yu.V.; KOMISSAROVA, L.N.; BORISOVA, A.P.; SAVICH, I.A.

Spectrophotometric study of the process of complex formation by the Box-Wilson method. Vest. Mosk. un. Ser. 2: Khim. 20 no.2:50-53 Mr-Ap '65.  
(MIRA 18:7)

1. Kafedra neorganicheskoy khimii Moskovskogo universiteta.

BERINGA, A.P.; SAVICH, I.S.; GRANTSKOY, A.G.; POMESSAROVA, T.N.; SPITSYN,  
T.K.S.I.

Determination of the composition of iron sulfocyanate by the  
Rox-Wilson method. V. Kh. Khim. un. Ser. 2: Khim. 20 no.3:51-53 My-Je  
'68. (MIRA 18:8)

L. Kafedra neorganicheskoy Khimii Miskovskogo universiteta.

KOMISSAROVA, L.Y.; MENIKOFF, A.L.; VASILIEVA, L.M.

Synthesis of neodymium phosphide. *Izv. AN SSSR. Neorg.  
Mater.* 1969; 493-497. (1969, 18:11)

1. Moskovskiy gosudarstvennyy universitet; Izv. Leningradsk.

GEL'PERIN, N.I.; KOMISSAROVA, L.N.; YURCHENKO, L.D.; MIROSENKO, A.P.;  
KOROVIN, S.S.

Extraction of zirconium and hafnium from hydrochloric acid  
solutions by acetophenone. Izv. vys. ucheb. zav.; khim. i  
khim. tekhn. 8 no.3:402-406 '65. (MIRA 18:10)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni  
Lomonosova, kafedra khimii i tekhnologii redkikh i rasseyan-  
nykh elementov.

(A)

L 11877-66

EWI(m)/EWP(t)/EWP(b) IJP(c) JD/JG

ACC NR:

AP6000764

UR/0078/65/010/012/2826/2827

AUTHOR: Komissarova, L. N.; Pokrovskiy, B. I.

ORG: Moscow State University im. M. V. Lomonosov, Department of Inorganic Chemistry (Moskovskiy gosudarstvennyy universitet, Kafedra neorganicheskoy khimii)

TITLE: Reaction of scandium oxide with oxides of the alkaline earth metals.

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 12, 1965, 3826-2827

TOPIC TAGS: chemical reaction, scandium compound, alkaline earth oxide, barium compound

ABSTRACT: The article describes the synthesis of several compounds of different compositions belonging to the barium oxide-scandium oxide system. Starting materials were chemically pure barium carbonate and scandium oxide with an impurities content of less than 0.1%. A mixture of barium carbonate and scandium oxide (0.5 grams) containing 3% excess barium carbonate over the calculated amount was ground with ethyl alcohol, pressed into tablets under a pressure of 3000 kg/cm<sup>2</sup> and subsequently annealed for 10 hours at 1300°C and then for 2 hours more at 1500°C. Phase analysis of the sintered samples was done by x-ray

Card 1/2

UDC: 546.633'41-31+546.633'42-31+546.633'431-31

Card

2/2 HW

2

L 23800-66 EWT(m)/EWP(t) IJP(c) JD/JG

ACC NR: AP6007251

(A)

UR/0363/66/002/002/0275/0280

AUTHOR: Komissarova, L.N.; Po rovskiy, V.I.; Shaplygin, I.S. 2/8

ORG: Moscow State University im. M.V. Lomonosov. Department of Chemistry  
(Moskovskiy gosudarstvennyy universitet, Khimicheskij fakul'tet)

TITLE: Reaction of manganese and scandium oxides in air

TOPIC TAGS: manganese compound, scandium<sup>27</sup> compound<sup>27</sup>, chemical reaction<sup>27</sup>

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v.2, no.2, 1966, 275-280

ABSTRACT: A table shows the composition of the samples investigated, the calcining temperature, and the calcining time. The mole % content of scandium oxide in the samples varied from 0 to 100%, the calcining temperature from 700 to 1100°C, and the calcining time from 2 to 100 hours. The starting samples were prepared by precipitation of scandium and manganese hydroxides by a mixture of NH<sub>4</sub>OH + H<sub>2</sub>O<sub>2</sub> from nitric acid solutions. The samples were calcined in a platinum boat at 700-1500°C and then quenched in liquid nitrogen. An X-ray analysis was made of the samples. An NTR-62<sup>14</sup> unit was used for thermal analysis. The magnetic susceptibility was determined by the Faraday method. The article gives a phase diagram of the system, constructed from the experimental data. The work

Card 1/2

UDC: 546'713-31 + 546.631-31 2

L 23800-66

ACC NR: AP6007251

established the existence of a compound with the composition  $\text{ScMnO}_3$  and three types of cubic solid solutions; based on  $\text{Sc}_2\text{O}_3$ ,  $\text{Mn}_2\text{O}_3$ , and a cubic modification with the composition  $\text{Mn}_3\text{O}_4$ . The compound  $\text{ScMnO}_3$  crystallizes in a hexagonal lattice; its specific magnetic susceptibility is  $18.0 \pm 0.5 \times 10^{-6}$  abs. el. units/gram; at  $1350 \pm 20^\circ\text{C}$  it decomposes with the formation of solid solutions based on  $\text{Sc}_2\text{O}_3$  and the cubic modification  $\text{Mn}_3\text{O}_4$ . The solubility of  $\text{Mn}_2\text{O}_3$  in scandium oxide changes only slightly with temperature and is from 17 to 20 mole %; the solubility of  $\text{Sc}_2\text{O}_3$  in cubic  $\text{Mn}_3\text{O}_4$  rises sharply from 10.5 mole % at  $1200^\circ\text{C}$  to 30.0 mole % at  $1500^\circ\text{C}$ . The article demonstrates further that scandium oxide does not form compounds or a wide range of solid solutions with  $\text{MnO}$ ,  $\text{NiO}$ ,  $\text{CoO}$ ,  $\text{CdO}$ , and  $\text{ZnO}$ . Orig. art. has: 5 figures and 4 tables.

SUB CODE: 07/ SUBM DATE: 30Jul65/ ORIG REF: 002/ OTH REF: 003

Card

2/2

L 41350-66

EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6021607

SOURCE CODE: UR/0020/66/168/005/1076/1079

AUTHOR: Komissarova, L. N.; Pokrovskiy, B. I.; Nachayeva, V. V.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy univer-

sitet)  
Journal of Materials with titanium dioxide

Moscow, v. 10, no. 5, 1966, 1076-1079

Abstract: Scandium compounds, titanium dioxide, titanium compound, phase diagram.  
 The  $\text{Sc}_2\text{O}_3$ - $\text{TiO}_2$  system, formed from  $\text{Sc}_2\text{O}_3$ - $\text{TiO}_2$  mixtures obtained by coprecipitation, was studied by x-ray phase and thermal analyses over a wide temperature range. High-temperature studies were made by using isothermal annealing in the 800-1500°C range, followed by quenching. The phase diagram of the system (up to 50 mole %  $\text{Sc}_2\text{O}_3$ ) was plotted (see Fig. 1). Because  $\text{TiO}_2$  loses oxygen at high temperatures, the system is not truly binary, but since the decomposition of  $\text{TiO}_2$  takes place very close to the melting point, the system may be considered binary. Unstable compounds of the composition  $2\text{Sc}_2\text{O}_3 \cdot 3\text{TiO}_2$  and  $3\text{Sc}_2\text{O}_3 \cdot 2\text{TiO}_2$  with a distorted fluorite structure are formed in this system; above 1150 and 1350°, respectively, these compounds undergo an order-disorder type transformation. Therein lies the main difference between the system studied and similar phase diagrams consisting of rare earth oxides and characterized by the formation of the compounds  $\text{Me}_2\text{O}_3 \cdot 2\text{TiO}_2$  and  $\text{Me}_2\text{O}_3 \cdot \text{TiO}_2$ , having the structure of pyro-

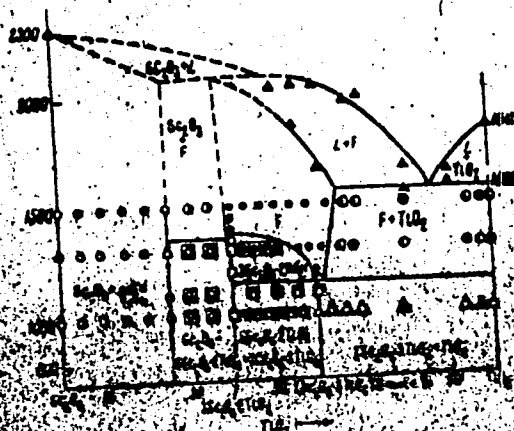
UDC: 546.862.71+71.501



ACC. NO. 186021607

chloro- and monoclinically distorted fluorite respectively. The paper was presented by Academician Spitsyn, V. I., 9 Oct 65. Orig. art. has 3 figures and 2 tables.

Fig. 1. Phase diagram of the  $\text{Sc}_2\text{O}_3$ - $\text{TiO}_2$  system



SUB CODE: 07, // SUBM DATE: 29Sep65/ ORIG REF: 001/ OTH REF: 005

Card 2/2 114

KOMISSAROVA, M.

Volunteer aids. Sov. profsoiuzy 19 no.16:20-22 Ag '63.  
(MIRA 16:10)

1. Zaveduyushchaya meditsinskim otdelom Tsentral'nogo soveta po  
upravleniyu kurortami professional'nykh soyuzov.

~~KOMISSAROVA, Margarita Guriyevna; POLTORANOV, Vladimir Vladimirovich;~~  
SLUTSKIY, Semen Yakovlevich; KOZLOV, I.I., red.; BLOKHIN, N.N.,  
red.; ANDREYEVA, L.S., tekhn. red.

[Health resorts of trade unions in the U.S.S.R.] Zdravnitsy  
profsoiuzov SSSR; spravochnik. Moskva, Izd-vo VTsSPS Prof-  
izdat, 1962. 494 p. (MIRA 15:3)

(HEALTH RESORTS, WATERING-PLACES, ETC.)  
(INDUSTRIAL RECREATION)

ACC NR: AP7001223

(A)

SOURCE CODE: UR/0066/66/000/012/0030/0031

AUTHORS: Kurylev, Ye. S. (Candidate of technical sciences); Yanovskiy, S. I.;  
Komissarova, M. G.; Fishman, M. A.; Terent'yeva, N. A.

ORG: /Kurylev and Yanovskiy/ Leningrad Engineering Institute for Refrigeration  
Industry (Leningradskiy tekhnologicheskii institut kholodil'noy promyshlennosti);  
/Komissarova, Fishman, and Terent'yeva/ Leningrad Refrigerated Transportation Combine  
(Leningradskiy khladokombinat)

TITLE: Storage of eggs in refrigerated chambers with controlled air humidity

SOURCE: Kholodil'naya tekhnika, no. 12, 1966, 30-31

TOPIC TAGS: food preservation, refrigeration, humidification

ABSTRACT: A chamber for storage of eggs maintained at -1.5 to -2.0C and 85% relative humidity is described. Maintenance at these conditions gave an increase of 1.5 times the egg storage period as compared with instructions given by the literature (Spravochnik po ekspluatatsii kholodil'nykh skladov. Pod redaktsiyey D. G. Ryutova. Gostorgizdat, 1963). The difficulty of maintaining the desired humidity (encountered during the summer) was circumvented by injecting steam by jet air-distribution. The chamber was loaded with 14 780 cartons of eggs. The storage time was up to 7 months. The weight loss of eggs was measured by weighing them every 30--35 days with an accuracy of  $\pm 0.1$  g. Results of the study are shown in Fig. 1.

Card 1/2

UDC: 637.4.004.4

ACC NR: AP7001223

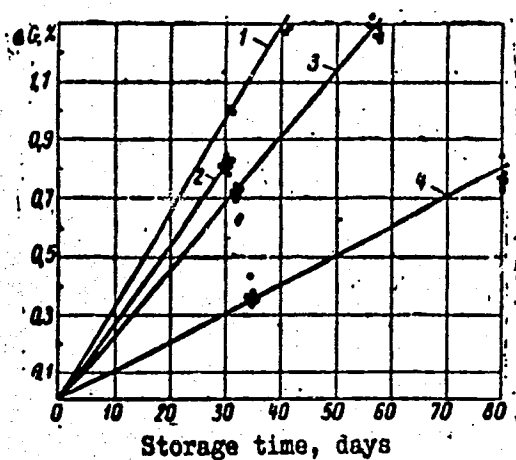


Fig. 1. Shrinkage of eggs in the refrigerated chamber: 1 - at temperature 0C, relative humidity  $\varphi = 85\%$ ; 2 - at -2C, no humidity control,  $\varphi = 68-72\%$ ; 3 - at -2C, humidity controlled,  $\varphi = 85\%$ ; 4 - at -2C, winter storage,  $\varphi = 85-90\%$

Orig. art. has: 2 figures and 1 table.

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 003  
Card 2/2

ACHKASOVA, I.O.; GAIKINA, A.G.; YEFREMOV, I.I.; SMAKHTINA, Yu.B.; KOMISSAROVA,  
M.I.; SOVETOVA, L.Ye.; CHISTIKOVA, A.I.; SHAKHOVA, A.N.

Effectiveness of ambulatory treatment of cholelithiasis patients  
at Zheleznovodsk Health Resort. Sbor. nauch. rab. vrach. san.-kur.  
uchr. profsciuzov no.1:121-125 '64.

(MIRA 18:10)

1. Zheleznodorozhnaya kurortnaya poliklinika (glavnyy vrach I.I.  
Yefremov).

S/126/63/015/002/019/033  
E081/E441

AUTHORS: Volkov, S.D., Klinskikh, N.A., Komissarova, M.L.

TITLE: Stresses and strains in polycrystals

PERIODICAL: Fizika metallov i metallovedeniye, v.15, no.2, 1963, 274-279

TEXT: The connection is discussed between structural (microscopic and macroscopic) stress components and the corresponding strains. It is shown that if the microstresses and microstrains are given in a determinate coordinate system, their mean (mathematically) values coincide with the macroscopic values determined for the whole polycrystal. If, however, the microscopic values are given in a random coordinate system and averaged over all possible orientations of the random coordinates, the mean values do not coincide with the macroscopic values. Accordingly, in contradiction to the assertion of E. Kröner (Zs.Phys., v.151, no.4, 1958, 504; Acta met., v.9, no.2, 1961, 155) the method considered by him for the calculation of macroscopic elastic constants appears to be inaccurate. There also appears to be an error in the initial assumptions of S.B.Batdorf and B..Budiansky (J. Appl. mech., v.121, no.4, 1954, 323) in which a

Card 1/2

Stresses and strains ...

S/126/63/015/002/019/033  
E081/E441

theory of plasticity allowing for structural effects is proposed.

ASSOCIATION: Ural'skiy politekhnicheskii institut im. S.M.Kirova  
(Ural Polytechnic Institute imeni S.M.Kirov)

SUBMITTED: May 28, 1962

Card 2/2



S/258/63/003/001/009/022  
E201/E141

AUTHORS: Volkov S.D. and Komissarova M.L. (Sverdlovsk)  
TITLE: On some representations of general solutions of  
boundary value problems in the theory of elasticity

PERIODICAL: Inzhenernyy zhurnal, v.3, no.1, 1963, 86-92

TEXT: The basic equations for the classical linear boundary value problems in the theory of anisotropic elasticity are the equilibrium equations, the geometrical equations expressing strains in terms of displacements, and the stress-strain equations (the generalised Hooke's law), containing 21 elastic constants. A general method of solving these equations is proposed which is more compact and convenient than the usual solution, particularly when dealing with statistically non-linear problems. These problems arise when the body under consideration is subject to chance fluctuations either in the conditions to which it is exposed, or in its own properties, for example, an aircraft wing in a turbulent air current, or a loaded polycrystalline body. The equilibrium equations, the geometrical equations, and the

Card 1/2

On some representations of ...

S/258/63/003/001/009/022  
E201/E141

stress-strain equations are generalised to fit the statistical problem; the distribution of chance magnitudes and functions is governed by the "expectation" and "correlation" functions. Thus, in the statistical boundary value problem, it is necessary to find not only the stress and strain distributions, but also the expectation and correlation functions, and a method based on three and six arbitrary functions is proposed for accomplishing this.

SUBMITTED: May 28, 1962

Card 2/2

VOLKOV, S.D.; KLINSKIKH, M.A.; KOMISSAROVA, M.L.

Stresses and deformations in polycrystalline materials. Fiz.  
met. i metalloved. 15 no.2:274-279 F '63. (MIRA 16:4)

1. Ural'skiy politekhnicheskii institut imeni Kirova.  
(Dislocations in crystals)  
(Crystal lattices)

KOMISSAROVA, M. V.

Mbr., Central Scientific Research Institute of Forestry, Leningrad (-1947-)

"Cytological Investigation of Polyploids of the Pinus Silvestris L.," Dok. AN, 58, No. 9,  
1947

(6)  
BREYEV, B. D., Central Scientific Research Institute  
of Leather Footwear Industry, Moscow - "New trends  
of technologies, new factory equipments in the  
Soviet Union" Section 2-c

KOMISSAROVA, N. B., Administrative Department of the  
Leather Trades Industries, Moscow - "Experiences  
of abrasion resistance of sole leathers" Section 1-d

PAVLOV, A., Prof. Dr., Moscow Technological Institute  
of Light Industry, Moscow - "Use of plastics in  
the shoe industry" Section 2-a (1962, 1963)

RODIONOV, A. M., Research Institute for the Fur  
Industry, Moscow - (Subject to be given later)  
Section 3-c

SVETKOV, V. N., Moscow Technological Institute of  
Light Industry, Moscow - "Principles of calculation  
of the strength of leather" Section 2-d

ZUBIN, M. P., Prof. Dr., Moscow Technological Institute  
of Light Industry, Moscow - "Principles of construction  
of rational last forms" Section 2-c

ZURABYAN, K. M., Central Scientific Research Institute  
of Leather Substitutes, Moscow - "Filling of the  
flabby parts of leathers" Section 1-d

report to be submitted for the Congress of the Scientific Society of the Leather, Shoe  
and Allied Industries, Budapest, Hungary, 3-6 Oct 1962

L 15816-66 EWT(m)/T DJ/WE

ACC NR: AP6020392

(A)

SOURCE CODE: UR/0204/66/006/001/0112/0114

AUTHOR: Sanin, P. I.; Chernyavskaya, L. F.; Sher, V. V.; Komissarova, N. I.; Bogomolov, V. M.

30  
B

ORG: Institute of Petrochemical Synthesis im. A. V. Topchiyev, AN SSSR (Institut neftekhimicheskogo sinteza AN SSSR)

TITLE: Apparatus for oxidizing organic liquids with automatic compensation for consumed oxygen and its recording

SOURCE: Neftekhimiya, v. 6, no. 1, 1966, 112-114

TOPIC TAGS: chemical laboratory <sup>apparatus,</sup> ~~apparatus~~, oxidation kinetics

ABSTRACT: A circulation-type unit was constructed for the liquid-phase oxidation of organic liquids (hydrocarbons, lubricating oils and other petroleum products) at various temperatures and atmospheric pressure, with automatic recording and compensation for the oxygen consumed in the reaction. The unit is convenient to operate and gives reproducible results. It can be used for studying the oxidation kinetics of hydrocarbons (and other compounds), for determining the stability of petroleum products, and for the comparative evaluation of the effectiveness of various antioxidants. Experimental data showed that the unit can be used to obtain kinetic data over a wide range of oxidation rates (oxygen absorption rates). Orig. art. has: 3 figures.

SUB CODE: 07/ SUBM DATE: 12Mar65/ ORIG REF: 001/ OTH REF: 001

Card 1/1

UDC: 542.943.084

N. I. KOMISSAROVA

**226**

**WILSON & BOOK 1007-6727/2000**

**DO NOT WRITE**

**Handwritten and POST. Inalterably filled, type**

[illegible]

**Editorial Board:** R.D. Goshavtsov (Meyr. ZL) Doctor of Chemical Sciences; G.S. Oul'pina, Doctor of Chemical Sciences; Zh. M. Ostrovskiy, Doctor of Sciences; V.Y. Furov, Candidate of Technical Sciences; and V.P. Pridemestrenko, Candidate of Chemical Sciences; ZL of Publishing House; I.I. Krutov; Perm. Ed.: T.P. Polozova.

**REMARKS:** This book is intended for chemists, chemical engineers, and technicians specializing in the chemistry of petroleum.

Comments: The book is a collection of papers presented at the Ninth International Conference on the Chemistry of Organic Sulfur and Nitrogen Compounds (Held in Prague, 1967). The book contains 11 papers, 1) Introduction, 2) Separation and fractionation, and analysis of organic sulfur compounds; 3) Separation and composition of organic sulfur compounds contained in petroleum and petroleum products; 4) Transformation of organic sulfur compounds by thermal catalysis; 5) Transformation of organic sulfur compounds in petrochemical processes; 6) Physicochemical properties of organic sulfur compounds; 7) Sulfur compounds in the environment. There are 315 references, of which 179 are Soviet, 110 English, 5 French, 12 German, and 1 Czech.

**TESTS OF CONFIDENCE**

**From the Editorial Staff**

**Introduction**

**Order 2/10**

### Inventory of Polymer Originals Compounds (Cont.)

201/2075

**Polymerization as a Method for Investigating the Chemical Nature of High-Molecular Condensed Aromatic Aliphatics**  
**Petroleum Compounds**

1

STRAIGHT-RUN PAUL FRACTIONS OBTAINED FROM SULFUR-CONTAINING PETROLEUM

201

Grebenshteyn, N.D., B.V. AYVANOY. Separation of Mixtures of Hydrocarbons and Organic Sulfur Compounds by the Chromatography Method in Vapor Phase.

120

Smith, F. J., To. A. Dyckhouse, H. J. MacIsaac. Separation of Sulfur Compounds and Aromatic Hydrocarbons by the Absorption Chromatography Method

15

Styrenolubers, 2,7, A. To. Int'g., Testing an Experimental Chromatographic Installation for the Production of a Concentrate of Organic Sulfur Compounds

5

Case 3/20

ACCESSION NR: AP4017576

S/0065/64/000/003/0062/0066

AUTHORS: Sanin, P.I.; Sher, V.V.; Chernyavskaya, L.F.; Melent'yeva, N.V.; Komissarova, N.I.

TITLE: Stability of oils containing antioxidant and additives of the sulfonate type.

SOURCE: Khimiya i tekhnol. topliv i masel, no. 3, 1964, 62-66

TOPIC TAGS: oil antioxidant, oil additive, oil, engine oil, lubricating oil

ABSTRACT: In view of the ever increasing use of sulfonate additives (which in themselves are not antioxidants but merely dispersers) to lubricating oils (of the DS-11 type), the authors undertook a study of additives and their combined action with different antioxidants. DS-11 is an oil selectively drawn from eastern, sulfur-rich crudes. Its paraffin-naphthene fraction has a molecular weight of 404,  $\rho_{40}^{20} = 0.8627$ ,  $n_D^{20} = 1.4740$ , oil viscosity  $v_0 = 66.8$  cst;  $v_{100} = 11.35$  cst. The additives studied were: (1) SB-3 (barium sulfonate) and antioxidants DF-1 (barium dialkyldithiophosphate),

1/2

Card



ACCESSION NR: AP4017576

(2) DF-11 (zinc dialkyldithiophosphate), (3) AN-22k (calcium dithiophosphate), (4) V-353 (free dialkylphenyldithiophosphoric acid), and (5) NG-183a (interaction product of terpenes and phosphorus penta-sulfide neutralized with calcium oxide). Their stability was evaluated according to oxygen absorption in a closed system at 1500. It was found that the above antioxidants range according to decreasing activity: DF-11, DF-1, AN-22k, B-353, NG-183a. At great oxidation depth, only the first two increase oil stability. Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 23Mar64

ENCL: 00

SUB CODE: OH, FL

NR REF SOV: 001

OTHER: 000

Cerd 2/2

ROBINZON, Ye.A.; D'YACHKOVA, Ye.A.; KOMISSAROVA, N.I.; GAREVSKAYA, G.S.;  
SANIN, P.I.

Use of the oxidation method for determining the structure  
of aromatic hydrocarbons from petroleum fractions. *Nefto-*  
*khimiia* 3 no.4:598-608 J1-Ag '63. (MIRA 16:11)

1. Institut neftekhimicheskogo sinteza AN SSSR imeni A.V.  
Topchiyeva.

S/081/61/000/022/059/076  
B101/B147

AUTHORS: Sanin, P. I., D'yachkova, Ye. A., Komissarova, N. I.

TITLE: Separation of sulfurous compounds from aromatic hydrocarbons by adsorption chromatography

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 393, abstract 22M84 (Sb. "Khimiya seryorgan. soyedineniy, soderzhashchikhaya v neftyakh i nefteproduktakh". M., AN SSSR, 1959, 125-138)

TEXT: Comparative studies of adsorbents of the metal silicate type were carried out with a view to separating aromatic and S compounds contained in the oil fraction (325-375°C) of the Romashki petroleum. Chromium silicate was found to be the best adsorbent. Chromium silicate enabled adsorption-chromatographic separation of that part of the light monocyclic aromatics containing 0.05% sulfur (approximately 0.4% of the S compounds) from aromatics and S compounds of the above-mentioned oil fraction (3.9% sulfur). Chromium silicate is described to have a catalytic effect on S compounds of this oil fraction. [Abstracter's note: Complete translation.]

Card 1/1

SHUYKIN, N.I.; ERIVANSKAYA, L.A.; KOMISSAROVA, N.L.;  
YAN AY-SI [Yang Ai-hsi]

Catalytic dehydrocyclization of 2-n.hexyl- and 2-sec.hexylnaphthalenes.  
Izv. AN SSSR Otd.khim.nauk no.2:327-333 F '62.

(MIRA 15:2)

1. Moskvskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Naphthalene)  
(Aromatization)

ACCESSION NR: AP4029227

S/0131/64/000/004/0182/0185

AUTHOR: Guzman, I. Ya.; Komissarova, N. M.; Krutikova, I. M.; Stepanov, M. A.

TITLE: Sintering and some properties of  $\text{CaF}_2$  ceramics

SOURCE: Ogneupory\*, no. 4, 1964, 182-185

ABSTRACT: Calcium fluoride has found wide use in various regions of technology as an active flux. Recently, calcium fluoride has begun to be used as a construction and shielding material for conducting a number of high-temperature chemico-metallurgical processes in fluorine-containing media. The authors bring to light processes of sintering as well as some properties of ceramics based on calcium fluoride. Characteristics of the initial materials are given in a table. Characteristics of ceramics from commercial calcium fluoride and the characteristics of ceramics from pure calcium fluoride are presented in tables which depict their properties at different temperature ranges. The composition in properties of grain structure samples of commercial calcium fluoride are given. Testing of calcium fluoride ceramics for corrosion resistance was conducted in a fluorine medium (concentration 92-97%) at a temperature of  $750^\circ\text{C}$  for 16 hours. The evaluation was conducted by visual and weight methods, as well as by stability change during the testing. The rate of corrosion of laboratory and industrial samples was from 5.5 to  $19 \text{ g/m}^2/\text{hr}$ ;

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ACCESSION NR: AP4029227

during testing the stability increased. The obtained results attest to the fact that in a fluorine medium, at 750°C, calcium fluoride ceramics are completely stable and maintain their stability. Therefore, parts can be recommended for service under such conditions as refractory lining material, filters, etc. Orig. art. has: 4 tables.

ASSOCIATION: Khimiko-tekhnologicheskij institut im. D. I. Mendeleeva (Chemico-technological Institute)

SUBMITTED: 00

DATE ACQ: 28Apr64

ENCL: 00

SUB CODE: ML

NO REF SOV: 000

OTHER: 005

Card 2/2

GUZMAN, I.Ya.; POLUBOYARINOV, D.N.; Primali uchastiye: KOMISSAROVA,  
N.M.; MOROZOVA, V.S.

Some properties of porous ceramics made of beryllium oxide.  
Ogneupory 27 no.10:457-462 '62. (MIRA 15:9)

1. Khimiko-tehnologicheskii institut im. Mendeleeva.  
(Refractory materials) (Beryllium oxide)

ACC NR: AT6036927

SOURCE CODE: UR/0000/66/000/000/0054/0062

AUTHORS: Serova, G. A.; Komissarova, N. M.; Vinogradova, L. V.; Makarova, T. S.

ORG: none

TITLE: Periclase refractories based on technical magnesium oxide

SOURCE: Nauchno-tekhnicheskoye obshchestvo chernoy metallurgii. Moskovskoye pravleniye. Vysokoogneupornyye materialy (Highly refractory materials), Moscow, Izd-vo Metallurgiya, 1966, 54-62

TOPIC TAGS: magnesium oxide, refractory oxide, high temperature ceramic material, refractory product, aluminum oxide

ABSTRACT: Results are reported from the study of production and properties of periclase refractories made of technical 98% MgO in the form of grains of sintered briquets. Sintered briquetting material was crushed, freed of iron impurities, and sieved. A fraction of < 0.5 mm was ground to obtain grain size < 0.06 mm, which was pressed into cylinders 36 mm in diameter and 50 mm high. The specimens were fired at 1730C for 1 or 4 hours. The porosity of the samples was 17-19%; they maintained a constant volume at 1800C and possessed a higher thermal stability than products made of sintered MgO. Introducing ~ 8% of Al<sub>2</sub>O<sub>3</sub> increased considerably the thermal stability (two to four times the number of thermal cycles). These

Card 1/2

ACC NR

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000824120004-0

studies culminated in initiating production (at the Podolsk Plant) of periclase refractories with granular structure and a maximum content of MgO, designed to serve as high-temperature lining materials and melting crucibles. Orig. art. has: 4 tables.

SUB CODE: 11/ SUBM DATE: 02Nov65/ ORIG REF: 013

Card 2/2



NAPORKO, A.G., kand.ekonom.nauk; BELEN'KIY, M.N., kand.ekonom.nauk;  
CHERNOV, P.N., dotsent; BEL'KOV, S.P., kand.ekonom.nauk;  
KOMISSAROVA, N.N., prepodavatel'; FAL'KOVSKAYA, D.L., starshiy  
inzh.-ekonomist

Necessary textbook on transportation economics ("Economics of  
railroad transportation" by I.V. Belov, N.E. Borovoi, N.G.  
Vinnichenko, G.S. Raikher, E.D. Khanukov, and N.F. Khokhlov.  
Reviewed by A.G. Naporko and others). Zhel.dor.transp. 43 no.8:  
95-96 Ag '61. (MIRA 14:8)

1. Zaveduyushchiy kafedroy "Ekonomika transporta" Tashkentskogo  
instituta inzhenerov zheleznodorozhnogo transporta (for Belen'kiy).
2. Kafedra "Ekonomika transporta" Tashkentskogo instituta  
inzhenerov zheleznodorozhnogo transporta (for Chernov).  
(Railroads) (Belov, I.V.) (Borovoi, N.E.)  
(Vinnichenko, N.G.) (Raikher, G.S.)  
(Khanukov, E.D.) (Khokhlov, N.F.)

GORKIN, V.Z.; AVAKYAN, A.A.; VEREVKINA, T.V.; KOMISSAROVA, N.V.

Use of zonal electrophoresis in vertical columns with a new anticonvection material (granulated polymethylmethacrylate) for purification of amino oxidase in the blood serum. Vop. med. khim. 8 no.6:638-645 N-D '62. (MIRA 17:5)

1. Laboratoriya biokhimi i aminov i drugikh azotistyk osnovaniy Instituta biologicheskoy i meditsinskoy khimii AN SSSR, Moskva.

GORKIN, V.Z.; KITROSSKIY, N.A.; KLYASHTORIN, L.B.; KOMISSAROVA, N.V.;  
LEONT'YEVA, G.A.; POKHKOVA, V.A.

Substrate specificity of amino acid oxidase. Biokhimiia 29 no.1:  
88-96 Ja-F '64. (MIRA 18:12)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR i  
Institut khimii prirodnikh soedineniy AN SSSR, Moskva.  
Submitted April 28, 1963.

KOMISSAROVA, N.V.; TSYKHANSKIY, T.S. [deceased]

New ways for solving problems in curing raw leather. Kozh.obuv.  
prom. 2 no.3:4-6 Mr '60, (MIRA 14:5)  
(Leather)

KOMISSAROV, A.N., kand.med.nauk; KOMISSAROVA, N.Ye.; KOSTITSYN, L.T., kand.  
med.nauk

Sequence of reactive changes in the blood exposed to ionizing radiation.  
Terap.arkh. 31 no.8:3-12 Ag '59. (MIRA 12:11)

1. Iz Glavnogo voyennogo gospihalya imeni N.N. Burdenko (nauchnyy  
rukovoditel' raboty - chlen-korrespondent AMN SSSR prof. N.A.  
Kurshakov).

(BLOOD radiation effects)

KOMISSAROV, A.N.; KOMISSAROVA, N.Ye.

On the medical properties of dipin in neoplasms of the hemato-  
poietic system. Vop.onk. 6 no.1:79-86 '60. (MIRA 13:10)  
(HEMATOPOIETIC SYSTEM—TUMORS) (CYTOTOXIC DRUGS)

ARKHIPOV, S.M.; KOMISSAROVA, P.D.; DRUZ', N.A.

Some properties of cesium dichromate. Zhur. neorg. khim. 9  
no.2:498-499 F'64. (MIRA 17:2)

KOMISSAROVA, R.A.

Statistical analysis in paleomagnetic studies. Trudy VNIIGRI  
no.204:38-49 '63. (MIRA 16:6)

(Rocks, Sedimentary--Magnetic properties)



KOMISSAROVA, R.A.

Paleomagnetic studies of the Asha series of the western slope  
of the Southern Urals. Trudy VNIGRI no. 204:69-82 '63.

(MIRA 1686)

(Ural Mountains--Geology, Stratigraphic)

(Ural Mountains--Rocks, Sedimentary--Magnetic  
properties)

KOMISSAROVA, R.A.; SLAUTSITAYS, I.P. [Slaucitais, I.]

Age of the Asha series according to paleomagnetic data. Trudy  
VNIGRI no.186:365-369 '61. (MIRA 15:3)  
(Geological time)

1.1800

1521 1087

32919  
S/194/61/000/011/049/070  
D271/D302

AUTHORS: Bystrov, Yu.M., Gulya-Yanovskiy, V.V., Komissarova,  
R.F., Merkulov, L.G., Novitskiy, V.A. and Sil'ver-  
stov, S.P.

TITLE: Nickel plating of type metal stereo plates in the  
ultrasonic field

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 11, 1961, 11, abstract 11 E81 (Poligr. proiz-vo,  
1961, no. 4, 13-15)

TEXT: The process of electrodeposition of metals in the  
ultrasonic field is briefly considered; it is pointed out that ult-  
rasonics intensify this process which is explained by acceleration  
of diffusion phenomena in the near-cathode layer. Nickel plating  
of stereos with the purpose of increased wearability was conducted  
under the influence of ultrasonic frequency of 27 kc/s, with the  
specific power of 0.004 - 7 W/cm<sup>2</sup>. It is shown that application

Card 1/2

32919

S/194/61/000/011/049/070  
D271/D302

Nickel plating of type metal...

of ultrasonics made it possible to shift the threshold of quality coverage from 1.5 to 5 A/dm<sup>2</sup>; this accelerates by four times the process of nickel deposition. At the same time, ultrasonic vibrations make it possible to raise cover hardness to 450 kg/mm<sup>2</sup> (instead of 250 when usual methods of nickel plating are used). It is noted that it is not worth while increasing the ultrasonic intensity beyond 0.5 W/cm<sup>2</sup> as the deposition of metal function of current remains virtually constant after this limit. An experimental ultrasonic bath was developed with a capacity of 80 l, using two vibrators type PM-1.3; experimental plating was done in this bath in optimal conditions. It was found that by using ultrasonics nickel plating can be accelerated altogether by 6-8 times. 5 figures. 1 table. [Abstracter's note: Complete translation]

Card 2/2

KOMISSAROVA, S.

"Organization of the campaign against epidemic conjunctivitis" by  
E.S. Avetisov. Reviewed by S. Komissarova. Med. zhur. Uzb.  
no. 1:84 Ja '60.

(MIRA 13:8)

(CONJUNCTIVITIS)  
(AVETISOV, E.S.)

KASYMOV, T. Ya., dotsent; KOMISSAROVA, S.

Activity of the Province Scientific Ophthalmological Society  
for 1961. Med. zhur. Uzb. no.6:63-64 Je '62. (MIRA 15:7)

1. Predsedatel' Tashkentskogo oblastnogo nauchnogo oftal'mologicheskogo obshchestva (for Kasymov). 2. Sekretar' Tashkentskogo oblastnogo nauchnogo oftal'mologicheskogo obshchestva (for Komissarova).

(TASHKENT PROVINCE—OPHTHALMOLOGICAL SOCIETIES)

KRIVENTSOV, V.I.; KISLOVA, L.V.; KOMISSAROVA, S.D.; KOROBYKOVA, L.

Photometric method of determining pentabromacetone. Izv. AN Turk. SSR.  
Ser. fiz.-tekh., khim. i geol. nauk no.1:54-60 '65. (NIRA 18:7)

1. Institut khimii AN Turkmenskoy SSR.

KASYMOV, T.Ya., dotsent; KOMISSAROVA, S.S.

Report on the work of the Tashkent Ophthalmological Society for  
1960. Med. zhur. Uzb. no.5:78-79 My '61. (MIRA 14:6)  
(TASHKENT PROVINCE---OPHTHALMOLOGICAL SOCIETIES)



KASYMOV, T.Ya., dotsent; KOMISSAROVA, S.S., assistant; GARIN, N.I.

Some organizational methods in the control of trachoma in the villages  
and districts of Tashkent Province. Med. zhur. Uzb. no. 6:58-63 Je '60.  
(MIRA 15:2)

1. Glavnyy vrach Tashkentskogo oblastnogo trakhomatoznogo dispansera  
(for Garin).  
(TASHKENT PROVINCE CONJUNCTIVITIS, GRANULAR)

DATA/555-0 33  
11/10/827

11/10/827

T. V. Gerdym, M. D.

Qualitative analysis of ferrites

21  
Moskva Universitet, Moscow, U.S.S.R. Qualitative and elementary quantitative determination of elements in ferrites, in two parts, 122-134

The analysis, manganese, iron, cobalt, nickel, copper ferrite, and ferrite, copper ferrite, cobalt ferrite, nickel ferrite, and complex, etc.

Various methods for dissolving ferrites and for separating the components of ferrites, and for the determination of the elements in ferrites were developed, and the qualitative analysis of the  $\text{Fe}_2\text{O}_3$ ,  $\text{NiO-Al}_2\text{O}_3\text{-Fe}_2\text{O}_3$ ,  $\text{MgO-Al}_2\text{O}_3\text{-Fe}_2\text{O}_3$ ,  $\text{CuO-Al}_2\text{O}_3\text{-Fe}_2\text{O}_3$ , and various model blends of oxide phases, and of ferrites such as iron, nickel-zinc, or magnesium-aluminum ferrites were discussed. The melting with potassium persulfate, and the qualitative analysis which involve complexing of Fe with cupric ions, and the

AI5007827

reaction with ethyl ether for the determination of iron components. include conventional gravimetric and volumetric methods, combined application of complexometric titrations, and selected potentiometric, coulometric, and chromatographic measurements in separations.  $Fe^{2+}$  soluble ferrites was determined by the high purity method after dissolution in HF-HCl mixture. "The authors acknowledge the assistance of G. C. for experimental work." Orig. act. had: "series."

0004

ENCL: 01

0004: 004, 00

0004: 005

OTHER: 011

KOMISSAROVA, Valentina Aleksandrovna, kand. tekhn. nauk;  
GAVRILOV, I.I., red.

[Methods for the cementation of soils during the laying  
of top dressing on logging roads; a concise manual] Me-  
tody tsementirovaniia gruntov pri ustroistve dorozhnykh  
odezhd na lesovoznykh dorogakh; kratkoe rukovodstvo.  
Moskva, Lesnaia promyshlennost', 1964. 31 p.

(MIRA 17:12)

L 23740-66 EWT(m)/T

ACC NR: AP6014817

SOURCE CODE: UR/0367/65/001/004/0621/0624

AUTHOR: Komissarova, V. A.; Sorokin, A. A.; Shpinel', V. S. -- Shpinel, V. S. 36

ORG: none

TITLE: Angular distribution of resonance scattering of 23.8-KEV sub gamma-quanta on Sn sup 118 nuclei 19

SOURCE: Yadernaya fizika, v. 1, no. 4, 1965, 621-624

TOPIC TAGS: angular distribution, resonance scattering, tin, gamma quantum, particle interaction, resonance absorption

ABSTRACT: The angular distribution of the resonance scattering of 23.8-kev  $\gamma$ -rays on Sn<sup>119</sup> nuclei, bound in the lattices of the compounds Mg<sub>2</sub>Sn and SnO<sub>2</sub>, have been measured and found equal to  $W(\theta) = 1 + (0.26 \pm 0.03)P_2(\cos \theta)$  and  $W(\theta) = 1 + (0.123 \pm 0.012)P_2(\cos \theta)$  respectively. The curve for Mg<sub>2</sub>Sn corresponds to a nonperturbed correlation; and that for SnO<sub>2</sub>, to a weakened one due to the quadrupole interaction, in which the relative magnitude of this interaction is  $E/\Gamma = 1.4 \pm 0.4$ . This is in agreement with data in literature obtained from resonance absorption spectra. The authors thank L. Akhyndovaya for assistance with the measuring and L. V. Chistyakov for the chemical cleaning of the sources. Orig. art. has: 2 figures. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 20 / SUBM DATE: 26Aug64 / ORIG REF: 004 / OTH REF: 002 2

Card 1/1 ULR

SAFONOV, V.I.; IVANOV, I.N.; KOMISSAROVA, V.N.

Semiconductor capacitor frequency meter. Izv.tekh. no.5:40-43  
My '63. (MIRA 16:10)

Komissarova, V. S.

*Chem* Investigation of electrochemical corrosion of magnesium.  
N. D. Tomashov, V. S. Komissarova, and M. A. Timonova.  
*Trudy Inst. Fiz. Khim. Akad. Nauk S.S.S.R.* No. 5, Ir-  
sledevan. Korrozii Met. No. 4, 172-97 (1955).—Samples of  
pure (99.99%) and com. (99.73%) Mg and 2 alloys (9% Al  
and 6.4% Al + 2.7% Zn) were submitted to a 0.5% NaCl  
soln. buffered by the corrosion products to pH 10.2. The  
type of attack was studied by macrophotographs. The  
corrosion rate was measured by the vol. of H evolved during  
the attack, either with or without application of an external  
current. In both cases the corrosion rate was a linear func-  
tion of time (except for the initial inhibition period). The  
corrosion rate was generally proportional to the total active  
anodic surface. It increased with the anodic c.d. because  
the no. of corrosion centers, const. for a given c.d., increased  
with the c.d. For high c.d.s. it was proportional to the  
logarithm of the c.d. The active microcathode surfaces of  
anodically corroding Mg were represented by the micro-  
surfaces of the metal covered with a thin passive film. The  
cathodes appearing on the surface of the alloys (Cu for  
example) rapidly lost their effectiveness because they be-  
came veiled with a hydrate of Mg oxide. —N. Goldowski

3

S.

PM

TOMASHOV, N.D.; KOMMISSAROVA, V.S.; TIMONOVA, M.A.

Investigating the electrochemical corrosion of magnesium. Trudy  
Inst.fiz.khim. no.5:172-197 '55. (MLBA 9:5)  
(Magnesium--Corrosion)



KOMISSAROVA, V. S.,

"Self-dissolution and Anodic Behavior of Magnesium," Korroziya i azshchita metallov  
(Corrosion and Protection of Metals), Moscow, Oborongiz, 1957. 366 p.

PURPOSE: This book is intended for engineering, technical, and scientific personnel at industrial plants, research institutes, and design offices working in the field of corrosion-protection of stainless steel, high-strength structural steel, and light alloys.

SOV/137-58-10-21295

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, 121 (USSR)

AUTHOR: Komissarova, V. S.

TITLE: Self-dissolution and Anodic Behavior of Magnesium (Samora-  
stvoreniiye i anodnoye povedeniye magniya)

PERIODICAL: V sb.: Korroziya i zashchita metallov. Moscow, Oborongiz,  
1957, pp 289-310

ABSTRACT: Processes occurring on an Mg anode in 0.25N HCl during anodic polarization with a variation in anode cd may be divided as follows: The period of negative differential effect (DE) ( $5 - 10 \text{ ma/cm}^2$ ), the period of positive DE ( $10 - 100 \text{ ma/cm}^2$ ), the third and fourth periods of proportional increase in the rate of evolution of  $\text{H}_2$  with an increase of the anode cd ( $>100 \text{ ma/cm}^2$ ). In the third period the rate of evolution of  $\text{H}_2$  with anodic polarization is lower, while in the fourth period it is higher than the rate of evolution of  $\text{H}_2$  without anodic polarization. It is established that the third and fourth periods express no DE but reflect only the anodic processes of the dissolution of Mg and other anodic processes of the formation of oxy compounds of Cl. The same four periods are observed during the anodic polarization

Card 1/2

SOV/137-58-10-21295

# Self-dissolution and Anodic Behavior of Magnesium

of Al in 0.5N NaOH. With an anode cd  $>30 \text{ ma/cm}^2$  (third and fourth periods) there begins a new process of anodic dissolution of Al and of discharge of  $\text{OH}^-$  with evolution of gaseous  $\text{O}_2$ . During the polarization of Mg in 5% NaCl solution a period takes place which corresponds to the fourth period on the curve of the anodic polarization of Mg in 0.25N HCl, and which likewise reflects no negative DE. A negative DE on Mg and Al is possible during the anodic polarization with low cd's only (less self-dissolution current) in the presence on the surface of the electrode of a protective film, which is unstable in the given electrolyte. Bibliography: 15 references.

1. Magnesium--Decomposition
2. Anodes--Electrochemistry
3. Magnesium--Polarization
4. Electrolytes

L. A.

Card 2/2

AR5011410

Khimiya, Abs. 6K37

Sarycheva, I. I. Khimiya, Abs. 6K37, Ye.A.

fatigue resistance of aluminum alloys

ab. korrozion. ustalost' metallov. Khimiya, Abs. 6K37, 124-202

aluminum base alloy, corrosion fatigue, fatigue strength, corrosion  
fatigue, corrosion resistance, fatigue strength, fatigue stress

**ABSTRACT:** Results are given of a determination of the fatigue strength of various Al-alloys with continuous and periodic immersion of the sample in 0.001% and 3% NaCl solutions. In the 3% solution the fatigue strength of the investigated alloys decreases by 40 to 60%, as compared with tests made in air. In the

0.001% solution the decrease is considerably less. Shot blasting increases the corrosion fatigue resistance of the alloys. Shot blasting is considered as a method of strengthening Al-alloys. Thus, the fatigue strength of V92 alloys 50% after shot blasting, while the fatigue strength in-

AS-011410

6. The relative notch sensitivity of the investigated alloys (round  
bars,  $n = 10^7$  in the ratio  $\sigma_{-1}/\sigma_{-10}$  in tests in 1% NaCl solution  
(cantilever-type test) and  $1.00 - 1.05$  in the fatigue test). From

44, 48

ENCL: 00

L 40991-66 EWP(e)/EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JH/MJW/JD  
ACC NR: AT6024935 (N) SOURCE CODE: UR/2981/66/000/004/0232/0237

AUTHOR: Komissarova, V. S.; Kireyeva, A. F.; Klyagina, N. S.;  
Krivenko, R. A.

ORG: none

TITLE: Corrosion resistance of the new sintered aluminum alloys

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysoko-  
prochnyye splavy (Heat-resistant and high-strength alloys), 232-237

TOPIC TAGS: ANODIZATION, ALLOY COMPOSITIONS  
aluminum alloy, dispersion strengthened metal, high  
strength alloy, sintered aluminum powder alloy, corrosion resistance /  
SAS aluminum alloy

ABSTRACT: The corrosion behavior of six SAS series aluminum alloys (see Table 1) was tested in a 3% solution of NaCl + 0.1% H<sub>2</sub>O<sub>2</sub> for 22 days, and also in the atmosphere of an industrial area for 3 years. Simultaneously, D16 and AK4 aluminum alloys were tested for comparison. Some SAS-1 alloy specimens were anodized and some were anodized and varnished. The corrosion susceptibility was evaluated from the weight loss and from the drop in strength and ductility. It was found that the corrosion resistance of SAS-1 and SAS-3 alloys in the industrial atmosphere was equal to that of AK4 alloy, with a loss of strength of

Card 1/2

L 40991-66  
ACC NR: AT6024935 (N) SOURCE CODE: UR/2981/66/000/004/0232/0237

CIA-RDP86-00513R000824120004-0

Table 1. Composition of SAS aluminum-base alloys.

Chemical composition, %												
Alloy	Si	SiC	Ni	Cr	Zn	Mg	Cu	Zr	Fe	Li	Mn	Ti
SAS-1	29.18	—	3.85	—	—	—	—	—	—	—	—	—
SAS-1	30.0	—	7.0	—	—	—	—	—	—	—	—	—
SAS-1	30.0	—	5.0	—	—	—	—	—	—	—	—	—
SAS-1	31.6	—	5.1	—	—	—	—	—	—	—	—	—
SAS-3	32.8	—	—	2.3	—	—	—	—	—	—	—	—
SAS-4	13.4	16.25	—	—	—	—	—	—	—	—	—	—
D16	0.3	—	—	—	0.6	—	4.8	—	0.2	—	1.4	—
AK-4	—	—	1.3	—	—	1.6	2.1	—	1.4	2.1	—	0.09

23.3—27.4% for the former and 28.6% for the latter in 3 years and a weight loss of 0.0017—0.0030 g/cm<sup>2</sup> for the former and 0.0029 for the latter. In the 22-day test in a 3% solution of sodium chloride, the SAS-1 alloy strength loss amounted to 60.5—63.0% and the weight loss to 0.377—0.480 g/cm<sup>2</sup>. Corresponding figures for D16 alloy were 11.9% and 0.063 g/cm<sup>2</sup> and for AK4 alloy, 24.2% and 0.063 g/cm<sup>2</sup>. SAS-4

alloy, however, after 40 days in a 3% sodium chloride solution, showed no changes in strength and ductility. Anodizing and anodizing with varnishing greatly improved the corrosion resistance of SAS-1 and lowered the strength loss by a factor of 1.5 and 5—6, respectively. Orig. art. has: 3 figures and 5 tables. [TD]

SUB CODE: 11 / SUBM DATE: none / ATD PRESS: 5057

Card 2/2 11b

ACC NR: AT6024941 (A,N) SOURCE CODE: UR/2981/66/000/004/0277/0287

AUTHOR: Komissarova, V. S.; Kireyeva, A. F.; Stepanova, M. G.; Fridlyander, I. N.

ORG: none

TITLE: Corrosion resistance of SAP material

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat resistant and high-strength alloys), 277-287

TOPIC TAGS: sintered aluminum powder, corrosion resistance

ABSTRACT: The corrosion resistance of SAP-1 sintered aluminum powder material in the atmosphere and in 3% NaCl was studied in the presence of 0.1% H<sub>2</sub>O<sub>2</sub> as a function of the content of aluminum oxide (1 to 16%) and iron (0.01 to 1%) on rods and sheets. It was found to be close to that of pure AOO aluminum. The iron admixture has an undesirable effect on the corrosion resistance of SAP material, and the iron content should therefore be limited to 0.2%. Above this value, the elongation loss after 10 months of tests in the atmosphere amounts to an average of 25-30%. Studies of the electrochemical behavior of SAP as a function of the aluminum and iron content showed the data on the corrosion resistance to be in full agreement with the results of electrochemical measurements: iron is an active cathodic inclusion, and its content above 0.2% is not permissible; aluminum oxide can also be regarded as a cathodic inclusion,

Card 1/2

L 46974-66

ACC NR: AT6024941

but it displays only a very slight effectiveness in 3% NaCl solution. Orig. art. has:  
7 figures and 7 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 006

*W*  
Card 2/2

L 145970-66 ENT(m)/T/EWP(W)/EWP(L)/ETI LJP(c) JH/JD/WB  
ACC NR: AT6024945 (A,N) SOURCE CODE: UR/2981/66/000/004/0303/0306

AUTHOR: Kutaytseva, Ye. I.; Komissarova, V. S.; Butusova, I. V.; Yegorova, N. V.;  
Usacheva, R. P.

ORG: none

TITLE: High-strength corrosion-resistant V91 alloy

SOURCE: Aluminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy  
(Heat resistant and high-strength alloys), 303-306

TOPIC TAGS: aluminum alloy property, high strength alloy, corrosion resistant alloy

ABSTRACT: The corrosion-fatigue properties of alloys of the Al-Mg-Zn system were  
studied at a constant content of 4% Zn, 0.35% Mn, and 0.17% Cr, with admixtures of  
copper from 0 to 1.5% and magnesium from 0 to 4%. Rod specimens were quenched from  
477°C in water and air, and aged for 4 hr at 100°C + 8 hr at 157°C. The optimum com-  
position of the alloy was given the designation V91. It contained 3.7-4.5% Zn, 1.6-  
2.0% Mg, 0.6-1.0% Cu, 0.1-0.25% Cr, 0.2-0.5% Mn, bal. aluminum. The strength charac-  
teristics of this alloy were determined. In absolute values, the corrosion-fatigue  
strength of V91 is higher than that of AV1 and AD33 alloys, but from the standpoint of  
loss of fatigue strength resulting from the attack of the corrosive medium (0.001%  
NaCl), V91 is inferior to AD33. It is concluded that semifinished products of V91

Card 1/2



1-46970-56

ACC NR: AT6024945

have high static and dynamic properties with a satisfactory corrosion resistance, and are easy to produce. Orig. art. has: 1 figure and 3 tables.

SUB CODE: 11/ SUBM DATE: none/ OTH REF: 005

*Card*  
Card 2/2

MANIKHAS, M.G.; KOMISSAROVA, Ye.I.; SAYEVICH, A.G.

Joint work of a dermato-venereological clinic and a women's  
health center in the control of trichomoniasis. Vest.derm.i  
ven. no.5:65-68 '61. (MIRA 14:12)

1. Iz kozhno-venerologicheskogo dispansera (glavnyy vrach M.G.  
Manikhas) i zhenskoy konsul'tatsii No.1 Ob'yedineniya rodil'nogo  
doma (glavnyy vrach M.V. Kovaleva) Rybinska ~~Maglarskoy~~ **Maglarskoy** oblasti.  
(TRICHOMONIASIS)

BASKOVA, K.A.; DZHELEPCV, B.S.; KOMISSAROVA, Z.A.

Positron annihilation in sulfur, selenium, and silicon. Zhur.  
eksp. i teor. fiz. 40 no.4:1001-1003 Ap '61. (MIRA 14:7)

1. Leningradskiy gosudarstvennyy universitet.  
(Positrons) (Quantum theory)

Komissaruk, A. M. Fields of vectors in a two-dimensional Riemannian space. Minsk. Gos. Ped. Inst. A. M. Gor'k. Uč. Zap. 5 (1956), 15-40. (Russian)

3  
1-F/W

Soit donnée une surface  $V_2CB_2$ , soient  $(r_1, r_2, n)$  ( $n$  étant le vecteur normal) les repères locaux. L'A. introduit la notion de dérivée d'une fonction  $\varphi$  (vecteur  $a$ ) selon le vecteur  $x$  par  $\varphi'x = \varphi_{,a}x^a$  ( $a'x = a^a_{,b}x^b r_a$ ), il démontre les identités de Ricci, Bianchi, Bianchi-Padova et les formules fondamentales pour le gradient, la divergence et le rotationnel. L'équation différentielle  $a'x = \lambda x + \nu'x \cdot a$  pour les scalaires  $\lambda, \nu$  et le vecteur  $a$  ( $a = [na]$ ,  $x$  est un vecteur arbitraire) possède une solution pour chaque surface: on trouve  $\varphi, \nu, t, \mu, \lambda, a$  des équations

$$\begin{aligned} (*) \quad & \Delta_2 \varphi + K = 0, \\ & \nabla \nu = (\nabla \varphi)' \tilde{\nabla} \varphi : (\nabla \varphi)^2 - \tilde{\nabla} \varphi, \quad t = \nabla \varphi : \sqrt{(\nabla \varphi)^2}, \\ & \mu = e^{\varphi}, \quad \lambda = e^{\varphi} \sqrt{(\nabla \varphi)^2}, \quad a = \mu t. \end{aligned}$$

A chaque réseau isotherme de  $V_2$  il correspond une solution de (\*) (à une constante près) et inversement: chaque  $\varphi$  satisfaisant à (\*) détermine le réseau isotherme à une rotation de la direction du réseau d'un angle constant près [voir Weise, Math. Z. 46 (1940), 665-691; MR 2, 161]. L'angle des directions des deux